



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

NOV 24 2004

Mr. Michael K. Jeffers  
Compliance Manager  
Rebec LLC  
P.O. Box 658  
Edmonds, WA 98020

Ref No. 04-0245

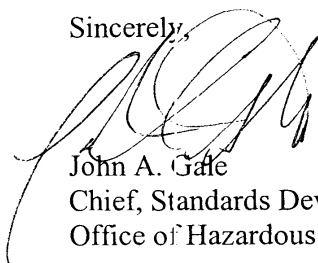
Dear Mr. Jeffers:

This is in response to your October 6, 2004 letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to dental amalgam. According to your letter, dental amalgam is an inter-metallic compound of mercury, silver, copper, and tin, used by dentists for the long-term filling of teeth. You state that the mercury in dental amalgam is bonded with the other metals and does not constitute a mixture. You further state that dental amalgam does not retain its property as a liquid nor does it exhibit any of the characteristics of elemental mercury. You ask whether dental amalgam would ever be identified as a hazardous substance because of the presence of mercury.

The answer is yes. Appendix A of the Hazardous Materials Table (HMT; § 172.101) lists materials and their corresponding reportable quantities (RQ's) that are designated as hazardous substances. Mercury is such a material and, thus, is regulated as a hazardous material under the HMR. However, provided your material does not meet the RQ for mercury in pounds (kilograms) and in concentration by weight if in a mixture or solution, and does not meet any of the criteria of a hazardous material specified in § 171.8, it would not be subject to the HMR.

I hope this information is helpful. If we can be of further assistance, do not hesitate to contact us.

Sincerely,



John A. Gale  
Chief, Standards Development  
Office of Hazardous Materials Standards



040245

172.101  
App. A

REBEC

October 6, 2004

*"Rebec has taken care of everything! I don't even have to call for pickup and Rebec provides all the documentation I need."*

Dr. Amy Norman

*"The Catch<sup>Hg</sup> system makes mercury management as easy as it could possibly be."*

Dr. Jack Kall

*"...When it comes to mercury separator systems, I want the best technology, product and service available. For me that's clearly the Catch<sup>Hg</sup>"*

Dr. Paul G. Rubin

Foster  
\$172.101  
Appendix A  
Hazardous Substance  
04-0245

Office of Hazardous Material Standards  
Research and Special Programs Administration  
Attn: DHM-10  
U.S. Department of Transportation  
400 7<sup>th</sup> Street SW  
Washington, DC 20590-0001

Dear Sir or Madam:

This letter is a request for interpretation and classification of the applicability of Appendix A to the Hazardous Materials Table for dental amalgam.


Dental amalgam is an inter-metallic compound of mercury, silver, copper, and tin. It is a solid, non-toxic, metal alloy used by dentists for long term filling of teeth. The mercury in this amalgam is bonded in a solid matrix with the other metals and would not constitute a mixture. The Webster's Dictionary defines a mixture as "a portion of matter consisting of two or more components in varying proportions that retain their own properties." The mercury in this amalgam no longer retains its own property as a liquid or has any of the characteristics of elemental mercury.

In appendix A of the Hazardous Materials Table is a list of Hazardous Substances and their reportable quantities. Mercury and mercury compounds are listed as hazardous substances but mercury amalgam is not.

Please clarify for me if a shipment of dental amalgam would ever be identified as a hazardous substance because of the presence of mercury in the alloy matrix.

Thank you for your assistance on this regulatory interpretation.

Sincerely,

  
Michael K. Jeffers, CHMM  
Compliance Manager  
Rebec LLC